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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,642	04/12/2004	Craig R. Horne	3275.06US03	1933

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DARDI & ASSOCIATES, PLLC  
220 S. 6TH ST.  
SUITE 2000, U.S. BANK PLAZA  
MINNEAPOLIS, MN 55402

EXAMINER
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HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1791.

MAIL DATE	DELIVERY MODE
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02/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

	<b>Application No.</b> 10/822,642	<b>Applicant(s)</b> HORNE ET AL.	
<b>Office Action Summary</b>	<b>Examiner</b> John Hoffmann	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,25,26,31-39,41 and 43-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,25,26,31-39,41 and 43-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)<br>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)<br>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____.<br>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)<br>6) <input type="checkbox"/> Other: _____. |
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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20, 25-26, 39, 41, and 43-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20: there is confusing antecedent basis for "dopant compositions" at the last two lines. Line 5 already refers to a "dopant" as well as the rare earth element – which is inherently a dopant. One would not be able to reasonably ascertain if the claimed "compositions" are in addition to those of line 5, or if they merely further describe them.

It unclear if the density of claim 41 and 43 is suppose to be interpreted as being a value "between" 0.05 and 0.40, or if the literal meaning that it goes "from" 0.05 to 0.40 (i.e. it starts out as 0.05 and then reaches 0.40.)

### ***Claim Rejections - 35 USC § 103***

Claims 20, 25-26, 39, 41, and 44-48 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks 4749396 in view of Miller 4501602, Berkey 4684384 and Kobayashi 3957474.

See the prior office action for the manner in which the references are applied.

Re: the new limitation that the coating and the core structure have different dopant compositions. Examiner first notes that this aspect is not described in the specification as having any special meaning. However a review of the specification indicates the breadth of this limitation. Based on page 11, lines 18-22 it is clear that a dopant composition can vary: for example the composition remains the composition regardless of its concentration. Page 39, line 15 also refers to introducing compositions into a single solution. Thus the term "composition" can be construed to cover (but not necessarily limited to) the same thing as 'ingredient'.

Turning to Hicks: Col. 3 line 58- col. 4 line 4 teaches adding dopants to the core rod. Col. 4, line 55—60 discloses applying a "CVD layer" to the core, but there is no statement of its composition. However col. 2 lines 3-10 indicates that "CVD" created silica "can be doped". Thus Hicks effectively discloses that the CVD layer can be doped or undoped. If it is doped, then it has at least one dopant. And since the core can have 'dopants', at least one of them has to be different from the CVD layer dopant - because not both of them can be identical. Thus coating and the core structure have different dopant compositions.

As comparison: The sentence "Sue and Sam traveled in different cars". It could mean that Sam rode in one car, while Sue rode in another. Or it could mean that they first rode in one car, then they both switched to a different car. It could also cover the situation that Sam and Sue first traveled in one car, then both got out, and Sue continued on in a different car. This last sort of interpretation is comparable to the broadest reasonable interpretation of the present claim limitation.

To summarize: The Office finds that the broadest reasonable interpretation of “the coating and the core structure have different dopant compositions” is: that there must be at least two different compositions, and the coating must have at least one of them, and the core structure must have at least the other one. The claim does not stipulate whether or not they each can have both dopant compositions. The claim does not stipulate whether or not they can have more than the at least two. The Office also finds that the term “dopant composition” encompasses individual dopants.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The “broadest reasonable interpretation” rule recognizes that “before a patent is granted the claims are readily amended as part of the examination process.” Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule “serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.” In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

Claims 31-38, 43, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks 4749396 in view of Miller 4501602, Berkey 4684384, Kobayashi 3957474 and Bi 5958348.

See the prior office action for the manner in which the references are applied – as well as the above discussion.

### ***Response to Arguments***

Applicant's arguments filed 19 December 2007 have been fully considered but they are not persuasive.

Regarding the "from" language, it is argued that the language is used correctly. It may be correct, but it is unclear for the reason set forth in the rejection. It is further argued that it does not indicate necessarily anything about time; Examiner fails to see the relevance of this. In fact Examiner agrees - the claim is confusing as to whether or not it require anything regarding time. Although applicant argues that the language is "completely clear and definite", applicant fails to point out any error in the rejection. The Office points out why it is unclear – applicant provides no indication as to why the Office's reasoning is faulty.

To put it another way: Claim 20 uses somewhat similar language, but in claim 20 the limitation states that the factor is "within the range". Claims 41 and 43 lack this language, and thus claims 41 and 43 suggest they are not factors with in a range. Applicant's suggested claim interpretation appears to ignore the tenet of claim construction that different words used in different claims are presumed to have different meanings. *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72, 50 USPQ2d 1465 (Fed. Cir. 1999) (recognizing "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope."). In other words since claim 20 indicates that the factor is merely within the range, claims 41 and 43 are presumed to not require only the factor be within the range.

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It is argued that that Hicks does not teach or suggest the different dopant compositions. Examiner disagrees for the reasons set forth in the above rejection.

IT is further argued that Hicks teaches away. Applicant points to col. 2 lines 49-54. Examiner disagrees because Hicks does not teach away from Applicant's claimed invention, or from the prior art combination because the disclosure of this reference does not criticize, discredit, or otherwise discourage the invention or the combination. *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1145-46 (Fed. Cir. 2004). The Hicks passage that applicant points to merely states that the sharp step change "can" be maintained. There is nothing which suggests one should have a sharp step, or that such has any advantage. Moreover, even if it did teach a sharp step is desirable, the claim does not preclude such. As pointed out in the above rejection, the claim merely requires different dopants.

Applicant argues that Hicks suggests that the entire core has a common composition. This may be true, but there is nothing which indicates that the coating also has that common composition. Moreover, the claims do not preclude a common composition. The claims are comprising in nature and thus are open to having one or more common composition, as long as there are at least two compositions which are different. Examiner understands that some possible reasonable interpretations would preclude any common composition, however, such would be *narrow* reasonable interpretations. The Office uses the *broadest* reasonable interpretation – as set forth in the rejection above.

It is argued that WO 02/32588 is not proper prior art against the present application. This does not appear to be relevant; no rejection relies on WO 02/32588.

It is further argued that Bi teaches away from forming a coating. There is no indication as to where (i.e. indication by column and line number) this supposed teaching is in Bi. Nor could examiner find anything in Bi which sets out to criticize, discredit, or otherwise discourage the invention or the combination. Therefore the assertion is not convincing.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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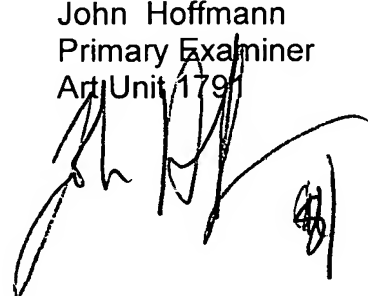
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jmh

John Hoffmann  
Primary Examiner  
Art Unit 1791



2/1/2008